ABSTRACT OF THE DISCLOSURE

A telecommunication fiber optic cable for gas pipeline application has a built-in leakage detecting device. The cable has an optical core including a number of telecommunication optical fibers, an outer jacket covering the optical core, and one or more gas leakage detector optical fibers. One or more gas leakage detector optical fibers are enclosed within the outer jacket. Preferably, the cable has a linearly extending rod reinforcing system having strength rods that force the cable to bend in a preferential bending place. Preferably, the leakage detector optical fibers are located at, or close to, a plane that is substantially orthogonal to the preferential bending plane and passing through the cable neutral axis.